

Claims

What is claimed is:

1. 1. A method for providing a library that is adapted to be instantiated into a runtime object, the method comprising:
 3. providing a template that corresponds to the structure of the runtime object with element placeholders for elements and with attribute placeholders for attributes;
 5. providing classes that form the library, wherein the classes correspond to the elements and the classes have replacement instructions for the placeholders, with the replacement instructions activated upon instantiating into the runtime object.
1. 2. The method of claim 1 wherein the template includes element placeholders having start portions and end portions differentiated by tag types.
1. 3. The method of claim 2 wherein the template includes element placeholders having element identification components belonging to the start portions and the end portions.
1. 4. The method of claim 2 wherein the element placeholders include element placeholders for a root element and for a branch element, with the start portions and the end portions of the branch element placed between the start portions and the end portions of the root element.
1. 5. The method of claim 4 wherein the template includes the attribute placeholders placed between the start portions and the end portions of the element placeholders.
1. 6. The method of claim 5 wherein the template includes code portions in the language of the runtime object placed between the start portions and the end portions of the element placeholders.

1 7. The method of claim 1 wherein, in providing the template, single placeholders that
2 represent a plurality of elements include a plurality indicator for indicating that the single
3 placeholders represent a plurality of elements.

1 8. The method of claim 1 wherein, in providing classes, the attribute placeholder
2 changes a form of tags from tags of a first type into tags of a second type.

1 9. The method of claim 1 wherein providing classes comprises using XML-techniques.

1 10. The method of claim 1 wherein providing classes comprises organizing the classes in
2 an abstract syntax tree (AST).

1 11. The method of claim 1 wherein the template and classes are provided such that the
2 library is adapted to be instantiated into a runtime object selected from the group consisting
3 of application class file, application project file, common registry, machine specific
4 registry, business component, and website layout.

1 12. The method of claim 1 wherein the template and the classes are provided such that
2 the library is adapted to be instantiated into a runtime object in a language selected from the
3 group consisting of VBA, HTML, C++, C, Java, JavaScript, XML, and WML.

1 13. The method of claim 1, wherein each element has associated attributes, further
2 comprising:

3 identifying data for the attributes associated with each of the elements; and
4 instantiating the classes by activating the replacement instructions to replace the
5 attribute placeholders with the data.

1 14. An article of manufacture comprising a computer-readable medium storing computer-
2 readable program code for causing a processor to perform operations comprising:

3 providing a runtime object having elements and attributes, with each element having
4 associated ones of the attributes;

5 pre-assembling the runtime object using classes in a library, wherein the classes
6 correspond to the elements, the classes include replacement instructions for attribute
7 placeholders, and the classes are based on a template that corresponds to a structure of the
8 runtime object, with the template including element placeholders for the elements and
9 attribute placeholders for the attributes;

10 identifying data for the attributes associated with each of the elements; and

11 instantiating the classes by activating the replacement instructions to replace the
12 attribute placeholders with the data.

1 15. The article of claim 14 wherein the template includes element placeholders having
2 start portions and end portions and the attribute placeholders are placed between the start
3 portions and the end portions of the element placeholders.

1 16. The article of claim 15 wherein the template includes code portions in the language of
2 the runtime object placed between the start portions and the end portions of the element
3 placeholders.

1 17. The article of claim 14 wherein the library is adapted to be instantiated into a runtime
2 object in a language selected from the group consisting of VBA, HTML, C++, C, Java,
3 JavaScript, XML, and WML.

1 18. A computer program stored on a computer-readable medium and comprising
2 processor instructions for providing a library adapted to be instantiated into a runtime
3 object, the processor instructions comprising:
4 first instructions for providing a template that corresponds to a structure of the runtime
5 object with element placeholders for elements and with attribute placeholders for attributes;
6 and
7 second instructions for providing classes that form the library, wherein the classes
8 correspond to the elements and the classes have replacement instructions for the
9 placeholders that are activated upon instantiating into the runtime object.

1 19. The computer program of claim 18 wherein the library is adapted to be
2 instantiated into a runtime object selected from the group consisting of application class
3 file, application project file, common registry, machine specific registry, business
4 component, and website layout.

1 20. A computer system for providing a library adapted to be instantiated into a runtime
2 object, the computer system comprising:

3 means for providing a template that corresponds to a structure of the runtime object
4 with element placeholders for elements and with attribute placeholders for attributes; and

5 means for providing classes that form the library, wherein the classes correspond to
6 the elements and the classes have replacement instructions for the placeholders that are
7 activated upon instantiating into the runtime object.